



# INTERMEDIATE STATE PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth here in.

**Intermediate Operating Permit Number:**

**Expiration Date:**

**Installation ID:** 175-0034

**Project Number:** 2005-03-112

**Installation Name and Address**

Moberly Correctional Center  
5201 South Morley  
Moberly, MO 65270  
Randolph County

**Parent Company's Name and Address**

Missouri Department of Corrections  
2729 Plaza Drive  
Jefferson City, MO 65102

**Installation Description:**

Moberly Correctional Center is a (C-3) medium custody institution in the Missouri Department of Corrections. The emission sources of air pollutants at this installation are boilers, an emergency generator, printing presses, and paint spray booths

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Effective Date

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Director or Designee  
Department of Natural Resources

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## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

Moberly Correctional Center is a (C-3) medium custody institution in the Missouri Department of Corrections. The emission sources of air pollutants at this installation are boilers, an emergency generator, printing presses, and paint spray booths

Reported Air Pollutant Emissions, tons per year							
Year	Particulate Matter ≤ Ten Microns (PM-10)	Sulfur Oxides (SO <sub>x</sub> )	Nitrogen Oxides (NO <sub>x</sub> )	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2004	0.55	0.09	7.82	15.64	5.96	-	-
2003	0.55	0.09	7.82	15.64	5.96	-	-
2002	-	-	-	-	-	-	-
2001	-	-	-	-	-	-	-
2000	-	-	-	-	-	-	-

No emissions for this installation were reported prior to 2003.

### EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emits air pollutants and which is identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit	EIQ Reference #
EU0010	Natural gas-fired Boiler #1	EP1
EU0020	Natural gas-fired Boiler #2	EP1
EU0030	Natural gas-fired Boiler #3	EP1
EU0040	Natural gas-fired Boiler #4	EP1
EU0050	Emergency diesel generator	EP8
EU0060	Two-station paint booth w/bake oven – Metal Plant paint line	EP2
EU0070	Sign shop two-station paint booth w/bake oven	EP3
EU0080	Enclosed downdraft paint booth – Metal Plant auto restoration	EP6
EU0090	Sign shop paint booth and tractor/trailer restoration	None

### EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment which does not have unit specific limitations at the time of permit issuance.

Description of Emission Source	EIQ Reference #
20,000 gallon storage tank for #2 fuel oil (Tank #1, installed 1998)	EP7
20,000 gallon storage tank for #2 fuel oil (Tank #2, installed 1998)	EP7
1960 forms press (Multigraphics model 1960 XECD/serial number 412963)	EP5
1860 forms press #1 (Multigraphics model 1860 CD/serial number 391520)	EP5
1860 forms press #2 (Multigraphics model 1860 CD/serial number 398803)	EP5

9910 forms press (A.B. Dick model 9910 XCD/serial number 05580)	EP5
1250 forms press #1 (Multigraphics model 1250/serial number 281565 G88)	EP5
1250 forms press #2 (Multigraphics model 1250 FR/serial number 801263 E90)	EP5
1250 forms press #3 (Multigraphics model 1250 FR/serial number 267770 F90)	EP5
1250 forms press #4 (Multigraphics model 1250 FR/serial number 234732 G87)	EP5
1250 forms press #6 (Multigraphics model 1250 FR/serial number 169378 G88)	EP5
1250 envelope press #1 (Multigraphics model 1250 FR/serial number 331707 G88)	EP5
1250 envelope press #2 (Multigraphics model 1250 DF/serial number 336227)	EP5
1250 envelope press #3 (Multigraphics model 1250/serial number 314540)	EP5
1250 envelope press #4 (Multigraphics model 1250/serial number 314560)	EP5
Jet press (Halm model JB-TWOD-P/serial number 2847)	EP5
Super jet press (Halm model JP-TWOD-6D/serial number 3858)	EP5
Indigo four-color press (Indigo ePrint Pro+/serial number 5244)	EP5

#### **DOCUMENTS INCORPORATED BY REFERENCE**

These documents have been incorporated by reference into this permit.

None.

Draft

## II. Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

### PERMIT CONDITION PW001

10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)

#### Emission Limitations:

- 1) The permittee shall discharge into the atmosphere from the entire installation less than 9.5 tons of any single hazardous air pollutant (HAP) in any consecutive 12-month period.
- 2) The permittee shall discharge into the atmosphere from the entire installation less than 24.5 tons of all HAPs combined in any consecutive 12-month period.

#### Monitoring/Recordkeeping:

- 1) The permittee shall maintain an accurate record of the amount of HAP emitted to the atmosphere from this installation. The permittee shall record the monthly and running 12-month totals of individual and aggregate HAPs emitted from this installation.
- 2) The permittee shall use the forms provided in Attachments A1, A2, A3, and A4, or equivalent forms created by the permittee, for this purpose.
- 3) All records shall be maintained for five years. They shall be kept onsite for at least two years. They may be kept in either hard-copy form or on computer media.
- 4) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon their verbal request and presentation of identification.

#### Reporting:

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after determining that installation HAP emissions exceeded either of the limitations in this permit condition.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

### PERMIT CONDITION PW002

10 CSR 10-6.065(2)(C) and 10 CSR 10-6.065(5)(A) Voluntary Limitation(s)

#### Emission Limitation:

The permittee shall discharge into the atmosphere from the entire installation less than 99.5 tons of sulfur dioxide (SO<sub>x</sub>) in any consecutive 12-month period.

#### Operational Limitations:

- 1) Boilers EU0010 through EU0030 shall be limited to burning pipeline grade natural gas, fuel oil with a sulfur content of 0.5 percent by weight or less, or any combination of these two fuels.

- 2) Boiler EU0040 shall be limited to burning pipeline grade natural gas, fuel oil with a sulfur content of 0.3 percent by weight or less, or any combination of these two fuels.
- 3) Emergency diesel generator EU0050 shall be limited to burning fuel oil with a sulfur content of 0.5 percent by weight or less.
- 4) The amount of fuel oil burned in the boilers and the emergency diesel generator together shall not exceed 2,750,000 gallons in any consecutive 12-month period.

**Monitoring/Recordkeeping:**

- 1) The permittee shall maintain an accurate record of the sulfur content of fuel used in the boilers and the emergency diesel generator. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
- 2) The permittee shall maintain a record of the amount of fuel oil burned in the boilers and the emergency diesel generator each month and in each consecutive 12-month period.
- 3) The permittee shall use the form provided in Attachment B, or an equivalent form created by the permittee, for this purpose.
- 4) When in compliance with the Operational Limitations of this permit condition, the permittee will also be in compliance with its Emission Limitation. Calculations demonstrating this are in Attachment C. The permittee shall keep this attachment with the rest of this permit.
- 5) If the permittee cannot meet the Operational Limitations of this permit condition, then the permittee must demonstrate compliance with its Emission Limitation by source testing. Source testing to determine compliance shall be performed as specified in 10 CSR 10-6.030(6). The heating value of the fuel shall be determined as specified in 10 CSR 10-6.040(2). The actual heat input shall be determined by multiplying the heating value of the fuel by the amount of fuel burned during the source test period.
- 6) Other methods approved in advance by the Missouri Department of Natural Resources' Air Pollution Control Program may be used to demonstrate compliance with this permit condition.
- 7) All records shall be maintained for five years. They shall be kept onsite for at least two years. They may be kept in either hard-copy form or on computer media.
- 8) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon their verbal request and presentation of identification.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after determining that installation SO<sub>x</sub> emissions exceeded the limitation in this permit condition, or that the installation failed to meet the operational limitations in this permit condition.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

### III. Emission Unit-Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

EU0010 THROUGH EU0030 – OLDER BOILERS			
Emission Unit	Description	Manufacturer/Model/Serial #	2004 EIQ Reference #
EU0010	Boiler #1, natural gas-fired but uses fuel oil as backup fuel, 35 MMBtu/hr, installed 1960	Lamont/M/2769	EP1
EU0020	Boiler #2, natural gas-fired but uses fuel oil as backup fuel, 50 MMBtu/hr, installed 1960	Lamont/M/2770	EP1
EU0030	Boiler #3, natural gas-fired but uses fuel oil as backup fuel, 12.5 MMBtu/hr, installed 1985	International Boiler Works/ unknown model/14938	EP1

#### PERMIT CONDITION (EU0010 THROUGH EU0030)-001

10 CSR 10-3.060 Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating

#### Emission Limitations:

- 1) The permittee shall not cause, allow or permit the emission of particulate matter from boiler EU0010 or EU0020 in excess of 0.39 lb/MMBtu. (The derivation of this figure is shown in Attachment D.)
- 2) The permittee shall not cause, allow or permit the emission of particulate matter from boiler EU0030 in excess of 0.26 lb/MMBtu. (The derivation of this figure is shown in Attachment D.)

#### Operational Limitation:

Boilers EU0010 through EU0030 shall be limited to burning pipeline grade natural gas, fuel oil with a sulfur content of 0.5 percent by weight or less, or any combination of these two fuels.

#### Monitoring/Recordkeeping:

- 1) The permittee shall maintain an accurate record of the sulfur content of fuel used in the boilers. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable. These may be the same records kept for demonstrating compliance with Permit Condition PW002; the permittee does not need to maintain two sets or copies of these records.
- 2) When in compliance with the Operational Limitation of this permit condition, the permittee will also be in compliance with its Emission Limitations. Calculations demonstrating this are in Attachment D. The permittee shall keep this attachment with the rest of this permit.
- 3) If the permittee cannot meet the Operational Limitation of this permit condition, then the permittee must demonstrate compliance with its Emission Limitations by source testing. Source testing to determine compliance shall be performed as specified in 10 CSR 10-6.030(5)(A). The heating value of the fuel shall be determined as specified in 10 CSR 10-6.040(2). The actual heat input shall be determined by multiplying the heating value of the fuel by the amount of fuel burned during the source test period.
- 4) Other methods approved in advance by the Missouri Department of Natural Resources' Air Pollution Control Program may be used to demonstrate compliance with this permit condition.

- 5) All records shall be maintained for five years. They shall be kept onsite for at least two years. They may be kept in either hard-copy form or on computer media.
- 6) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon their verbal request and presentation of identification.

**Reporting:**

Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit

<p align="center"><b>PERMIT CONDITION (EU0010 THROUGH EU0030)-002</b> 10 CSR 10-6.220 Restriction of Emissions of Visible Air Contaminants</p>
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**Emission Limitations:**

- 1) The permittee shall not cause or permit emissions to be discharged into the atmosphere from boiler EU0010 or EU0020 any visible emissions with an opacity greater than 40%.
- 2) The permittee shall not cause or permit emissions to be discharged into the atmosphere from boiler EU0030 any visible emissions with an opacity greater than 20%.
- 3) Exception: The permittee may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

**Monitoring:**

- 1) The permittee shall conduct opacity readings on these emission units (EU0010 through EU0030) using the procedures contained in USEPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit is operating and when the weather conditions allow. *Readings should only be taken when a boiler is burning fuel oil, not when it is burning natural gas.* If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. No weekly observation is required for a boiler during a week when it burns only natural gas. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two weeks for a period of eight weeks. No biweekly observation is required for a boiler during a two-week period when it burns only natural gas. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made semi-annually. No semi-annual observation is required for a boiler during a half-year when it burns only natural gas. If a violation is noted, monitoring reverts to weekly.

If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency. If the source has already performed the



weekly and biweekly monitoring and is doing monitoring in compliance with a previous permit, the weekly and biweekly monitoring do not need to be repeated.

**Recordkeeping:**

- 1) The permittee shall maintain records of all observation results (See Attachment E1 or E2.), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions which result in visible air emissions. (See Attachment F.)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (See Attachment G.)
- 4) Attachments E1, E2, F and G contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.
- 5) All records shall be maintained for five years. They shall be kept onsite for at least two years. They may be kept in either hard-copy form or on computer media.
- 6) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon their verbal request and presentation of identification.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

**PERMIT CONDITION (EU0010 THROUGH EU0030)-003**

10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds

**Emission Limitations:**

- 1) No person shall cause or allow emissions of sulfur dioxide into the atmosphere from any indirect heating source in excess of eight pounds of sulfur dioxide per million BTUs actual heat input averaged on any consecutive three hour time period

- 2) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO <sub>2</sub> )	0.03 parts per million (ppm) (80 micrograms per cubic meter (µg/m <sup>3</sup> ))	Annual arithmetic mean
	0.14 ppm (365 µg/m <sup>3</sup> )	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 µg/m <sup>3</sup> )	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H <sub>2</sub> S)	0.05 ppm (70 µg/m <sup>3</sup> )	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 µg/m <sup>3</sup> )	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	10 µg/m <sup>3</sup>	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 µg/m <sup>3</sup>	1-hour average not to be exceeded more than once in any 2 consecutive days

**Operational Limitation:**

Boilers EU0010 through EU0030 shall be limited to burning pipeline grade natural gas, fuel oil with a sulfur content of 0.5 percent by weight or less, or any combination of these two fuels.

**Monitoring/Recordkeeping/Reporting:**

The Operational Limitations for this permit condition is identical to the first Operational Limitations in Permit Condition PW002. The monitoring, recordkeeping, and reporting used to demonstrate compliance with that permit condition also suffice to demonstrate compliance with this one. No additional monitoring, recordkeeping, or reporting is required.

EU0040 – NEWER BOILER			
Emission Unit	Description	Manufacturer/Model/Serial #	2004 EIQ Reference #
EU0040	Boiler #4, natural gas-fired but uses fuel oil as backup fuel, 12.55 MMBtu/hr, installed 2005	Cleaver Brooks/unknown model/unknown serial #	EP1

PERMIT CONDITION EU0040-001
10 CSR 10-6.070 New Source Performance Regulations 40 CFR Part 60, Subpart A General Provisions and Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

**Emission/Operational Limitations:**

- 1) The permittee shall not cause to be discharged into the atmosphere from boiler EU0040, when it is combusting fuel oil, any gases that contain SO<sub>2</sub> in excess of 215 ng/J (0.50 lb/million Btu) heat input. As an alternative, the permittee shall not combust fuel oil in boiler EU0040 that contains greater than 0.3 weight percent sulfur. [40 CFR §60.42c(d) and 40 CFR §60.48c(g)]

- 2) When firing fuel oil in boiler EU0040, compliance with the emission limits or fuel oil sulfur limits may be determined based on a certification from the fuel supplier, as described under 1) in the Monitoring/Recordkeeping portion of this permit condition. [40 CFR §60.42c(h) & (h)(1)]
- 3) The SO<sub>2</sub> emission limits and fuel oil sulfur limits apply at all times when boiler EU0040 is combusting fuel oil, including periods of startup, shutdown, and malfunction. [40 CFR §60.42c(i)]

**Monitoring/Recordkeeping:**

- 1) The permittee shall keep records of fuel oil supplier certification including the following information. [40 CFR §60.48c(e) and (f)]
  - a) The name of the oil supplier;
  - b) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil (Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396-78, 89, 90, 92, 96, or 98 "Standard Specification for Fuel Oils"); and [§60.48c(f)(1) & §60.41c – Definition]
  - c) The weight percent of sulfur in the oil.
- 2) The permittee shall record and maintain records of the amounts of the fuels combusted during each calendar month. [40 CFR §60.48c(g)]
- 3) The permittee shall use the top half of the form provided in Attachment B, or an equivalent form created by the permittee, for this purpose.
- 4) The permittee shall maintain all records required under this permit condition for a period of two years following the date of such record. [40 CFR §60.48c(h)]

**Reporting:**

- 1) The following information shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit. [40 CFR §60.48c(d), (e), (f), and (j)]
  - a) Calendar dates covered in the reporting period,
  - b) Records of any fuel supplier certifications, as described in item 3) in the Monitoring/Recordkeeping section of this permit condition.
  - c) In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the responsible official stating either that "The records of fuel supplier certifications submitted represent all of the distillate fuel oil combusted during the time period being reported" or that "Only natural gas, and no distillate fuel oil, was combusted during the time period being reported".
- 2) The permittee shall report any deviations/exceedances of the operational limitation of this permit condition and any deviations from the Monitoring/Recordkeeping and Reporting requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

<b>EU0050 – EMERGENCY DIESEL GENERATOR</b>			
Emission Unit	Description	Manufacturer/Model/Serial #	2004 EIQ Reference #
EU0050	Emergency diesel generator, 16 cylinder, 1556 HP, 1160 KW, installed 1986	Engine: Caterpillar / unknown model / SN25Z00654 Generator: Marathon / 684FDR8449GGW / RK-19-51670-9/6	EP8

**PERMIT CONDITION EU0050-001**  
10 CSR 10-6.260 Restriction of Emissions of Sulfur Compounds

**Emission Limitations:**

- 1) Emissions from any existing or new source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.
- 2) Stack gasses shall not contain more than thirty-five milligrams (35 mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
- 3) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards.

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO <sub>2</sub> )	0.03 parts per million (ppm) (30 micrograms per cubic meter (µg/m <sup>3</sup> ))	Annual arithmetic mean
	0.14 ppm (365 µg/m <sup>3</sup> )	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 µg/m <sup>3</sup> )	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H <sub>2</sub> S)	0.05 ppm (70 µg/m <sup>3</sup> )	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 µg/m <sup>3</sup> )	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H <sub>2</sub> SO <sub>4</sub> )	10 µg/m <sup>3</sup>	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 µg/m <sup>3</sup>	1-hour average not to be exceeded more than once in any 2 consecutive days

**Operational Limitation:**

This emission unit shall be limited to burning fuel oil with a sulfur content of 0.5 percent by weight or less.

**Monitoring/Recordkeeping/Reporting:**

The Operational Limitation for this permit condition is identical to the third Operational Limitation in Permit Condition PW002. The monitoring, recordkeeping, and reporting used to demonstrate

compliance with that permit condition also suffice to demonstrate compliance with this one. No additional monitoring, recordkeeping, or reporting is required.

<b>EU0060 THROUGH EU0090 – PAINT SPRAY BOOTHS</b>			
Emission Unit	Description	Manufacturer/Model #	2004 EIQ Reference #
EU0060	Two-station paint booth w/bake oven – Metal Plant paint line, installed pre-1980	Advanced Curing Systems	EP2
EU0070	Sign shop two-station paint booth w/bake oven, installed pre-1980	Advanced Curing Systems	EP3
EU0080	Enclosed downdraft paint booth – Metal Plant auto restoration, installed 2002	In-house fabrication	EP6
EU0090	Sign shop paint booth and tractor/trailer restoration, installed 2003	In-house fabrication	None

**PERMIT CONDITION (EU0060 through EU0090) - 001**  
10 CSR 10-6.220 Restriction of Emissions of Visible Air Contaminants

**Emission Limitations:**

- 1) The permittee shall not cause or permit emissions to be discharged into the atmosphere from paint booths EU0060 through EU0090 any visible emissions with an opacity greater than 20%.
- 2) Exception: The permittee may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

**Monitoring:**

- 1) The permittee shall conduct opacity readings on these emission units (EU0060 through EU0090) using the procedures contained in USEPA Test Method 22. At a minimum, the observer should be trained and knowledgeable about the effects on visibility of emissions caused by background contrast, ambient lighting, observer position relative to lighting, wind and the presence of uncombined water. Readings are only required when the emission unit is operating and when the weather conditions allow. If no visible or other significant emissions are observed using these procedures, then no further observations would be required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The following monitoring schedule must be maintained:
  - a) Weekly observations shall be conducted for a minimum of eight consecutive weeks after permit issuance. No weekly observation is required for a paint booth during a week when it is not used. Should no violation of this regulation be observed during this period then-
  - b) Observations must be made once every two weeks for a period of eight weeks. No biweekly observation is required for a paint booth during a two-week period when it is not used. If a violation is noted, monitoring reverts to weekly. Should no violation of this regulation be observed during this period then-
  - c) Observations must be made semi-annually. No semi-annual observation is required for a paint booth during a half-year when it is not used. If a violation is noted, monitoring reverts to weekly.

If the source reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner from the initial monitoring frequency. If the source has already performed the weekly and biweekly monitoring and is doing monitoring in compliance with a previous permit, the weekly and biweekly monitoring do not need to be repeated.

**Recordkeeping:**

- 1) The permittee shall maintain records of all observation results (See Attachment E1 or E2.), noting:
  - a) Whether any air emissions (except for water vapor) were visible from the emission units,
  - b) All emission units from which visible emissions occurred, and
  - c) Whether the visible emissions were normal for the process.
- 2) The permittee shall maintain records of any equipment malfunctions which result in visible air emissions. (See Attachment F.)
- 3) The permittee shall maintain records of any Method 9 test performed in accordance with this permit condition. (See Attachment G.)
- 4) Attachments E1, E2, F and G contain logs including these recordkeeping requirements. These logs, or an equivalent created by the permittee, must be used to certify compliance with this requirement.
- 5) All records shall be maintained for five years. They shall be kept onsite for at least two years. They may be kept in either hard-copy form or on computer media.
- 6) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon their verbal request and presentation of identification.

**Reporting:**

- 1) The permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten days after the permittee determined using the Method 9 test that the emission unit(s) exceeded the opacity limit.
- 2) Reports of any deviations from monitoring, recordkeeping and reporting requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

**PERMIT CONDITION (EU0060 through EU0090) - 002**

10 CSR 10-6.400 Restriction of Emission of Particulate Matter From Industrial Processes

**Emission Limitation:**

The permittee shall not emit particulate matter from any of the paint booths EU0060 through EU0090 in excess of 0.5 lb/hr.

**Monitoring:**

- 1) Painting operations shall not be operated without a filter in place.
- 2) The filters shall be inspected for holes, imperfections, proper installation or other problems that could hinder the effectiveness of the filter.
- 3) The filters shall be inspected each shift before spraying begins and after installation of a new filter. When a paint booth is not operated during a shift, no inspection is required for that shift.
- 4) The manufacturer's recommendations shall be followed with regard to installation and frequency of replacement of the filters.

**Recordkeeping:**

- 1) The permittee shall maintain records of the inspections of filters including when they occur. (See Attachment F.)
- 2) The permittee shall maintain these records for the most recent five years. They must be maintained on-site for two years. They may be kept in either written or electronic form.
- 3) The permittee shall immediately make these records available for inspection to any Department of Natural Resources personnel upon request.

**Reporting:**

Reports of any deviations from monitoring and recordkeeping requirements of this permit condition shall be submitted semi-annually, in the semi-annual monitoring report and annual compliance certification, as required by Section V of this permit.

Draft

## IV. Core Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR), Code of State Regulations (CSR), and local ordinances for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

### 10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
  - a) Name and location of installation;
  - b) Name and telephone number of person responsible for the installation;
  - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
  - d) Identity of the equipment causing the excess emissions;
  - e) Time and duration of the period of excess emissions;
  - f) Cause of the excess emissions;
  - g) Air pollutants involved;
  - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
  - i) Measures taken to mitigate the extent and duration of the excess emissions; and
  - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.
- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.



#### **10 CSR 10-6.060 Construction Permits Required**

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

#### **10 CSR 10-6.065 Operating Permits**

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(5)(B)1.A(III)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065, §(5)(C)(1) and §(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources personnel upon request. [10 CSR 10-6.065, §(5)(C)(1) and §(6)(C)3.B]

#### **10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information**

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- 2) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- 3) The fees shall be due April 1 each year for emissions produced during the previous calendar year. The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the director.

#### **10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential**

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the Director.

#### **10 CSR 10-6.150 Circumvention**

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

#### **10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin**

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

- 3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
  - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
  - b) Paving or frequent cleaning of roads, driveways and parking lots;
  - c) Application of dust-free surfaces;
  - d) Application of water; and
  - e) Planting and maintenance of vegetative ground cover.

#### **10 CSR 10-6.180 Measurement of Emissions of Air Contaminants**

- 1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

#### **10 CSR 10-3.030 Open Burning Restrictions**

- 1) The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.
- 2) Exception - Open burning of trade waste or vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.
- 3) Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:
  - a) The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;
  - b) The schedule of burning operations;
  - c) The exact location where open burning will be used to dispose of the trade wastes;
  - d) Reasons why no method other than open burning is feasible; and
  - e) Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.
- 4) Upon approval of the open burning permit application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt Moberly Correctional Center from the provisions of any other law, ordinance or regulation.
- 5) The permittee shall maintain files with letters from the director approving the open burning operation and previous DNR inspection reports.

### **10 CSR 10-3.090 Restriction of Emission of Odors**

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

**This requirement is not federally enforceable.**

### **Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone**

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
  - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
  - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
  - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.
  - c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with recordkeeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
  - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
  - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR part 82, Subpart A, Production and Consumption Controls.
- 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.

The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR part 82*

#### **10 CSR 10-6.280 Compliance Monitoring Usage**

- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
  - a) Monitoring methods outlined in 40 CFR Part 64;
  - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Any other monitoring methods approved by the director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
  - a) Monitoring methods outlined in 40 CFR Part 64;
  - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, "Operating Permits", and incorporated into an operating permit; and
  - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
  - a) Applicable monitoring or testing methods, cited in:
    - i) 10 CSR 10-6.030, "Sampling Methods for Air Pollution Sources";
    - ii) 10 CSR 10-6.040, "Reference Methods";
    - iii) 10 CSR 10-6.070, "New Source Performance Standards";
    - iv) 10 CSR 10-6.080, "Emission Standards for Hazardous Air Pollutants"; or
  - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

## V. General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

### **10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.B Permit Duration**

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

### **10 CSR 10-6.065, §(5)(C)1 and §(6)(C)1.C General Recordkeeping and Reporting Requirements**

- 1) Recordkeeping
  - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
  - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources personnel upon request.
- 2) Reporting
  - a) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
  - b) The permittee shall submit a report of all required monitoring by:
    - i) April 1st for monitoring which covers the January through June time period.
    - ii) October 1st for monitoring which covers the July through December period.
    - iii) Exception. Monitoring requirements which require reporting more frequently than semi-annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
  - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit.
  - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
    - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7 of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
    - ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.

- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semi-annual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

#### **10 CSR 10-6.065 §(5)(C)1 and §(6)(C)1.D Risk Management Plan Under Section 112(r)**

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

#### **10 CSR 10-6.065(5)(C)1.A General Requirements**

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted under this rule.
- 6) Failure to comply with the limitations and conditions that qualify the installation for an Intermediate permit make the installation subject to the provisions of 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit.

**10 CSR 10-6.065(5)(C)1.C Reasonably Anticipated Operating Scenarios**

None. The boilers may be fired with either natural gas or fuel oil, but this does not constitute different scenarios.

**10 CSR 10-6.065, §(5)(B)4; §(5)(C)1, §(5)(C)3, §(6)(C)3.B and §(6)(C)3.D, and §(6)(C)3.E.(I) – (III) and (V) – (VI) Compliance Requirements**

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
  - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
  - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
  - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and exceedances must be included in the compliance certifications. The compliance certification shall include the following:
  - a) The identification of each term or condition of the permit that is the basis of the certification;
  - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
  - c) Whether compliance was continuous or intermittent;
  - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
  - e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

#### **10 CSR 10-6.065, §(5)(C)1 and §(6)(C)7 Emergency Provisions**

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
  - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
  - b) That the installation was being operated properly,
  - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
  - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

#### **10 CSR 10-6.065(5)(C)5 Off-Permit Changes**

- 1) Except as noted below, the permittee may make any change in its permitted installation's operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Off-permit changes shall be subject to the following requirements and restrictions:
  - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is a Title I modification; Please Note: Changes at the installation which affect the emission limitation(s) classifying the installation as an intermediate source (add additional equipment to the recordkeeping requirements, increase the emissions above major source level) do not qualify for off-permit changes.
  - b) The permittee must provide written notice of the change to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, no later than the next annual emissions report. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change; and
  - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes.

#### **10 CSR 10-6.020(2)(R)12 Responsible Official**

The application utilized in the preparation of this permit was signed by Tony Gammon, Superintendent. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All



representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

**10 CSR 10-6.065 §(5)(E)4 and §(6)(E)6.A(III)(a)-(c) Reopening-Permit for Cause**

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (MDNR) or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 2) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
  - a) The permit has a remaining term of less than three years;
  - b) The effective date of the requirement is later than the date on which the permit is due to expire; or
  - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 3) MDNR or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

**10 CSR 10-6.065 §(5)(E)1.A and §(6)(E)1.C Statement of Basis**

This permit is accompanied by a statement setting forth the legal and factual basis for the draft permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

## VI. Attachments

Attachments follow.



For month of \_\_\_\_\_, year of \_\_\_\_\_

For HAP Name: \_\_\_\_\_ CAS No.: \_\_\_\_\_

Company Name: Moberly Correctional Center  
Installation Location: 5201 South Morley, Moberly, MO 65270      Randolph County      Installation ID: 175-0034

Column A	Column B <sup>2</sup>
Tank Identification	Monthly HAP Emitted (tons)
Tank #1	
Tank #2	
Subtotal of This HAP Emitted This Month <sup>3</sup> (tons)	
Running 12-Month Subtotal of This HAP Emitted <sup>4</sup> (tons)	

- 1 Duplicate and fill out this form each month for each HAP emitted from tanks. If more than fifteen different tanks contained a specific HAP during one month, use more than one sheet for that HAP for that month and fill out total lines only on the last of these multiple sheets.
- 2 Maintain documentation, such as TANKS 4.0 printouts, verifying HAP emissions from tanks
- 3 Subtotal of This HAP Emitted This Month = sum of all Column B entries for this month and HAP from tanks
- 4 Running 12-Month Subtotal of This HAP Emitted = Subtotal line above + Subtotal lines from previous 11 months' Attachment A2s for this HAP

**ATTACHMENT A3**  
**Tracking Record of Monthly Individual HAP Emissions from All Sources**

For month of \_\_\_\_\_, year of \_\_\_\_\_

For HAP Name: \_\_\_\_\_ CAS No.: \_\_\_\_\_ <sup>1</sup>

Company Name: Moberly Correctional Center

Installation Location: 5201 South Morley, Moberly, MO 65270

Randolph County

Installation ID: 175-0034

\_\_\_\_\_ Subtotal of This HAP Emitted This Month from Paints, Inks, and Solvents <sup>2</sup> (tons)

\_\_\_\_\_ Subtotal of This HAP Emitted This Month from Tanks <sup>3</sup> (tons)

\_\_\_\_\_ Subtotal of this HAP emitted this month from any other source <sup>4</sup> (tons)

\_\_\_\_\_ Total of This HAP Emitted This Month <sup>5</sup> (tons)

\_\_\_\_\_ Running 12-Month Total of This HAP Emitted <sup>6</sup> (tons)

1 Duplicate and fill out this form each month for each HAP emitted

2 Take this figure from Attachment A1 for this HAP for this month and year

3 Take this figure from Attachment A2 for this HAP for this month and year

4 If there are any other sources of this HAP for this month and year at the installation, enter the subtotal emitted here, and maintain documentation verifying the figure.

5 Sum the subtotals on the previous three lines to obtain this total

6 Sum the total line above and the total lines from the previous 11 months' Attachment A3s for this HAP to obtain this running 12-month total

***If Running 12-Month Total of This HAP Emitted is not more than 9.5 tons for any HAP emitted, then installation is in compliance with the first emission limitation of Permit Condition PW001.***

Company Name: Moberly Correctional Center  
Installation Location: 5201 South Morley, Moberly, MO 65270      Randolph County      Installation ID: 175-0034

- 1 Duplicate and fill out this form each month. If more than fifteen different HAPs are emitted in one month, use more than one sheet for that month and fill out total line only on the last of these multiple sheets.
- 2 Copy from heading of one "Attachment A3 Tracking Record of Monthly Individual HAP Emissions from All Sources" for this month and year. There will be one row on this form for each "Attachment 3 Tracking Record of Monthly Individual HAP Emissions from All Sources" form for this month and year.
- 3 Copy from "Running 12-Month Total" on the same "Attachment A3 Tracking Record of Monthly Individual HAP Emissions from All Sources" as in 2 above.
- 4 Combined Running 12-Month Total = total of all figures in Column C

*If Combined Running 12-Month Total is not more than 24.5 tons, then installation is in compliance with the second emission limitation of Permit Condition PW001.*

**ATTACHMENT B**  
**Tracking Record for Fuel Usage in Boilers and Generator**  
For month of \_\_\_\_\_, year of \_\_\_\_\_

Company Name: Moberly Correctional Center  
Installation Location: 5201 South Morley, Moberly, MO 65270      Randolph County      Installation ID: 175-0034

(A1) \_\_\_\_\_ Current month's natural gas usage in boiler EU0010 ( $10^3$  scf)  
(A2) \_\_\_\_\_ Current month's natural gas usage in boiler EU0020 ( $10^3$  scf)  
(A3) \_\_\_\_\_ Current month's natural gas usage in boiler EU0030 ( $10^3$  scf)  
(A4) \_\_\_\_\_ Current month's natural gas usage in boiler EU0040 ( $10^3$  scf)  
(A) \_\_\_\_\_ Current month's natural gas usage in all boilers ( $10^3$  scf) This line is the sum of lines (A1), (A2), (A3), and (A4).

(B1) \_\_\_\_\_ Current month's fuel oil usage in boiler EU0010 (gal)  
(B2) \_\_\_\_\_ Current month's fuel oil usage in boiler EU0020 (gal)  
(B3) \_\_\_\_\_ Current month's fuel oil usage in boiler EU0030 (gal)  
(B4) \_\_\_\_\_ Current month's fuel oil usage in boiler EU0040 (gal)  
(B) \_\_\_\_\_ Current month's fuel oil usage in all boilers (gal) This line is the sum of lines (B1), (B2), (B3), and (B4).

**Lines (A4) and (B4) satisfy the second requirement in the Monitoring/Recordkeeping portion of Permit Condition EU0040-001.**

(C) \_\_\_\_\_ Current month's fuel oil usage in emergency diesel generator (gal)  
(D) \_\_\_\_\_ Current month's total fuel oil usage in boilers and generator (gal) This line is the sum of lines (B) and (C).  
(E) \_\_\_\_\_ Last month's 12-month running total fuel oil usage in boilers and generator (gal). This is line (G) from Attachment B for last month.  
(F) \_\_\_\_\_ Last year's same month's total fuel oil usage in boilers and generator (gal). This is line (D) from Attachment B for same month last year.  
(G) \_\_\_\_\_ Current 12-month running total fuel oil usage in boilers and generator (gal).  
(G) = (D) + (E) - (F). As a check, this should equal the total of the (D) lines from this month and the previous eleven months.

**If Line (G), current 12-month running total fuel usage in boilers and generator, is less than 2,750,000 gal, installation is in compliance with the fourth operational limitation in Permit Condition PW002.**

## ATTACHMENT C

### Compliance Demonstration for Permit Condition PW002

The only emission sources for sulfur oxides at this installation are the boilers (EU0010 through EU0040) and the emergency diesel generator (EU0050)

#### Simplifying Assumptions

- 1) It is assumed that all sulfur in the fuel is emitted as sulfur dioxide (SO<sub>2</sub>).
- 2) The calculations are done as if the boilers burned natural gas all the time, and the boilers and the generator also burned 2,750,000 gallons of fuel oil in a 12-month period. This is physically impossible, especially given the generator's Maximum Hourly Design Rate of 40 gal/hr, but it will overestimate instead of underestimate the SO<sub>2</sub> emissions. It gives a scenario worse than worst-case.
- 3) It is assumed that all the fuel oil (diesel) burned has a sulfur content of 0.5% by weight. It could have less than that at least part of the time. This assumption also overestimates instead of underestimates the SO<sub>2</sub> emissions. It gives a worst-case scenario.

#### Input Values

Heat Input:

Total Heat Input Capacity = Sum of heat input capacity of boilers and generator, in MMBtu/hr  
= 35 + 50 + 12.5 + 12.55 + 4 = 114 MMBtu/hr

Note: For Emergency diesel generator,  $(1556HP) \left( \frac{2543.5Btu/hr}{HP} \right) \left( \frac{MMBtu}{10^6 Btu} \right) = 4MMBtu/hr$

Natural Gas:

Heating value = 1050 Btu/scf

SO<sub>2</sub> emission factor for combustion = 0.6 lb/10<sup>6</sup> scf [From Table 1.4-1 in AP-42]

Fuel oil/diesel:

Sulfur content by weight = 0.5%

SO<sub>2</sub> emission factor for combustion = 142S lb/10<sup>3</sup> gal, where S is the sulfur content by weight percent  
= (142)(0.5) lb/10<sup>3</sup> gal = 71 lb/10<sup>3</sup> gal [This is the larger of the two factors from Tables 1.3-1 and 3.4-1 in AP-42.]

#### Natural Gas Combustion Potential to Emit SO<sub>2</sub>

$$\left( \frac{(114 - 4) \times 10^6 Btu}{hr} \right) \left( \frac{scf Natural Gas}{1050 Btu} \right) \left( \frac{0.6 lb SO_2}{10^6 scf Natural Gas} \right) \left( \frac{ton}{2000 lb} \right) \left( \frac{8760 hr}{12 Months} \right) = 0.28 ton SO_2 / 12 Months$$

#### Fuel Oil Combustion Potential to Emit SO<sub>2</sub>

$$\left( \frac{2,750,000 gal Fuel Oil}{12 Months} \right) \left( \frac{71 lb SO_2}{10^3 gal Fuel Oil} \right) \left( \frac{ton}{2000 lb} \right) = 97.6 tons SO_2 / 12 Months$$

#### Total Potential to Emit SO<sub>2</sub> in 12-Month Period

**0.28 ton + 97.6 tons = 97.9 tons < 99.5 tons.** This shows that if the boilers and generator together burn no more than 2,750,000 gallons of fuel oil with a sulfur content of 0.5% or less in any consecutive 12-month period, then the installation will be in compliance with the emission limitation in Permit Condition PW002.

## ATTACHMENT D

### Demonstration of Compliance with Permit Condition (EU0010 THROUGH EU0030)-001

The particulate matter (PM) emission limit for 10 CSR 10-3.060, *Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating*, is computed based on Q, where Q is the total heat input capacity, in MMBtu/hr. This is the sum of the heat inputs of the four boilers EU0010 through EU0040 and the emergency diesel generator EU0050.

$$Q = 35 + 50 + 12.5 + 12.55 = 114 \text{ MMBtu/hr}$$

This is an intermediate value, between 10 MMBtu/hr and 10,000 MMBtu/hr, so emission limit E must be calculated from equations.

#### Emission Limits

Boilers EU0010 and EU0020 were installed by February 24, 1971, so they are existing sources for the purposes of this regulation. For each of these two boilers:

$$E = 0.90 Q^{-0.174} = 0.90(114)^{-0.174} = 0.39 \text{ lbPM / MMBtu}$$

Boiler EU0030 was installed after February 24, 1971, so it is a new source for the purposes of this regulation. For this boiler:

$$1.31 Q^{-0.338} = 1.31(114)^{-0.338} = 0.26 \text{ lbPM / MMBtu}$$

#### Potential to Emit (PTE) PM

##### Input Values

Natural Gas:

Heating value = 1050 Btu/scf

PM emission factor for combustion =  $7.6 \text{ lb}/10^6 \text{ scf}$  [From Table 1.4-2 in AP-42]

Fuel oil:

Heating value = 140,000 Btu/gal

PM emission factor for combustion =  $2 \text{ lb}/10^3 \text{ gal}$  [From Table 1.3-1 in AP-42.]

##### Natural Gas Combustion PTE PM

$$\left( \frac{7.6 \text{ lbPM}}{10^6 \text{ scfNaturalGas}} \right) \left( \frac{\text{scfNaturalGas}}{1050 \text{ Btu}} \right) \left( \frac{10^6 \text{ Btu}}{\text{MMBtu}} \right) = 0.007 \text{ lbPM / MMBtu}$$

##### Fuel Oil Combustion PTE PM

$$\left( \frac{2 \text{ lbPM}}{10^3 \text{ galFuelOil}} \right) \left( \frac{\text{gal}}{140000 \text{ Btu}} \right) \left( \frac{10^6 \text{ Btu}}{\text{MMBtu}} \right) = 0.014 \text{ lbPM / MMBtu}$$

Since either 0.007 lb PM/MMBtu or 0.014 lb PM/MMBtu is much less than 0.39 lb PM/ MMBtu, boilers EU0010 and EU0020 are in compliance with Permit Condition (EU0010 THROUGH EU0030)-001 when burning either natural gas or fuel oil with a sulfur content of 0.5 percent by weight or less. Since either 0.007 lb PM/MMBtu or 0.014 lb PM/MMBtu is much less than 0.26 lb PM/ MMBtu, boiler EU0030 is also in compliance when burning those fuels.



### ATTACHMENT E1

Note: Observe boilers only when they are burning fuel oil, not when they are burning natural gas.

Method 22 (Outdoor Observation Log)		
Emission Unit		
Observer	Date	
Sky Conditions		
Precipitation		
Wind Direction	Wind Speed	
Sketch process unit: Indicate the position relative to the source and sun; mark the potential emission points and/or the observing emission points.		
Observation Clock Time	Observation Period Duration (minute:second)	Accumulative Emission Time (minute:second)
Begin Observation		
End Observation		

Note: Observe boilers only when they are burning fuel oil, not when they are burning natural gas.

[illegible]

## ATTACHMENT F

### Inspection/Maintenance/Repair/Malfunction Log

[illegible]

## ATTACHMENT G

Method 9 Opacity Emission Observations	
Company	Observer
Location	Observer Certification Date
Date	Emission Unit
Time	Control Device

Hour	Min.	Seconds				Steam Plume (check if applicable)		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							

SUMMARY OF AVERAGE OPACITY				
Set Number	Time		Opacity	
	Start	End	Sum	Average

Readings ranged from \_\_\_\_\_ to \_\_\_\_\_ % opacity.

Was the emission unit in compliance at the time of evaluation? \_\_\_\_\_  
YES NO Signature of Observer \_\_\_\_\_

# STATEMENT OF BASIS

## **Voluntary Limitations**

In order to qualify for this Intermediate State Operating Permit, the permittee has accepted voluntary, federally enforceable emission limitations. Per 10 CSR 10-6.065(5)(C)1.A.(VI), if these limitations are exceeded, the installation immediately becomes subject to 10 CSR 10-6.065(6) and enforcement action for operating without a valid part 70 operating permit. It is the permittee's responsibility to monitor emission levels and apply for a part 70 operating permit far enough in advance to avoid this situation. This may mean applying more than eighteen months in advance of the exceedance, since it can take that long or longer to obtain a part 70 operating permit.

## **Permit Reference Documents**

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Intermediate Operating Permit Application, received March 9, 2005.
- 2) 2004 Emissions Inventory Questionnaire, received March 9, 2005; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

## **Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits**

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

10 CSR 10-6.070, *New Source Performance Regulations*, does apply to this installation now. It was not checked on the application because it did not apply at that time. Since then, the installation has installed boiler EU0040, to which 40 CFR 60 Subpart Dc applies. See "New Source Performance Standards Applicability" below.

## **Other Air Regulations Determined Not to Apply to the Operating Permit**

The Air Pollution Control Program (APCP) has determined that the following requirements are not applicable to this installation at this time for the reasons stated.

10 CSR 10-6.100, *Alternate Emission Limits*, does not apply to this installation. Per 10 CSR 10-6.100(1)(A), it is exempt because it is in an ozone attainment area.

## **Construction Permit Revisions**

The following revisions were made to construction permits for this installation.  
None.

## New Source Performance Standards Applicability

- 1) 40 CFR 60 Subparts D, Da, Db, and Dc
  - a) 40 CFR 60 Subpart D, *Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971*, does not apply to any of the boilers EU0010 through EU0040 because none of them have heat inputs of more than 250 MMBtu/hr.
  - b) 40 CFR 60 Subpart Da, *Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978*, does not apply either, for the same reason.
  - c) 40 CFR 60 Subpart Db, *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, does not apply either, because none of the boilers have heat inputs of more than 100 MMBtu/hr.
  - d) 40 CFR 60 Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, does not apply to boilers EU0010 through EU0030 because they were constructed by June 19, 1984. It does apply to boiler EU0040.
    - i) Boiler EU0040's heat input is less than 30 MMBtu/hr. Per 40 CFR §60.43c(e), the particulate matter standard does not apply to it.
    - ii) Since the sulfur dioxide standard specifies no restrictions for firing with natural gas, it only applies to boiler EU0040 when it being is fired with fuel oil.
    - iii) Boiler EU0040 is restricted to burning only natural gas or fuel oil with a maximum sulfur content by weight of 0.3%. The calculations below show that the potential sulfur dioxide emissions rate is 0.0006 lb/MMBtu when burning natural gas and 0.30 lb/MMBtu when burning the fuel oil. Both of these figures are under 0.32 lb/MMBtu. Therefore, per 40 CFR §60.48c(g), records of fuel usage can be kept by month instead of by day.

Heating value of natural gas = 1050Btu/scf

SO<sub>2</sub> emission factor for natural gas combustion = 0.6 lb/10<sup>6</sup> scf [From Table 1.4-1 in AP-42]

Heating value of fuel oil = 140,000 Btu/gal

Sulfur content by weight of fuel oil = 0.3%

SO<sub>2</sub> emission factor for combustion of fuel oil = 142S lb/10<sup>3</sup> gal, where S is the sulfur content by weight percent = (142)(0.3) lb/10<sup>3</sup> gal = 42.6 lb/10<sup>3</sup> gal [This is the larger of the two factors from Tables 1.3-1 and 3.4-1 in AP-42.]

Potential to Emit SO<sub>2</sub> for Natural Gas Combustion =

$$\left( \frac{0.6 \text{ lb SO}_2}{10^6 \text{ scf Natural Gas}} \right) \left( \frac{\text{scf Natural Gas}}{1050 \text{ Btu}} \right) \left( \frac{10^6 \text{ Btu}}{\text{MMBtu}} \right) = 0.0006 \text{ lb SO}_2 / \text{MMBtu}$$

Potential to Emit SO<sub>2</sub> for Fuel Oil Combustion =

$$\left( \frac{42.6 \text{ lb SO}_2}{10^3 \text{ gal Fuel Oil}} \right) \left( \frac{\text{gal}}{140000 \text{ Btu}} \right) \left( \frac{10^6 \text{ Btu}}{\text{MMBtu}} \right) = 0.30 \text{ lb SO}_2 / \text{MMBtu}$$
    - iv) 40 CFR §60.42c(d) only restricts the weight percent sulfur in the fuel oil burned to 0.5%. Permit Condition EU0040-001 restricts it to 0.3%. This was done so the installation can reduce recordkeeping from daily to monthly. (See item iii) above.)

2) 40 CFR 60 Subparts K, Ka, and Kb

Two 20,000-gallon ( $75^+ \text{ m}^3$ ) tanks were constructed at the installation in 1988 to hold #2 fuel oil as a backup for the natural gas normally burned in the boilers.

- a) 40 CFR 60 Subpart K, *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978*, does not apply to these tanks because they each have a storage capacity less than 40,000 gallons.
- b) 40 CFR 60 Subpart Ka, *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984*, does not apply either, for the same reason.
- c) 40 CFR 60 Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984*, regulates tanks of this size, but not if they store a liquid with a maximum true vapor pressure less than 15.0 kPa. The true vapor pressure of #2 fuel oil [from Table 7.1-2 in AP-42] is only 0.022 psi even when the temperature is as high as 100°F.

$$(0.022 \text{ psi}) \left( \frac{6.895 \text{ kPa}}{\text{psi}} \right) = 0.15 \text{ kPa}..$$

Since 0.15 kPa is less than 15kPa, the tanks are not subject to this regulation.

- 3) 40 CFR 60, Subpart EE, *Standards of Performance for Surface Coating of Metal Furniture*, does not apply to the two of the four paint booths at this installation (EU0060 and EU0070) because they were installed before November 28, 1980. It does not apply to the other two (EU0080 and EU0090) because they are not used to paint metal furniture
- 4) 40 CFR 60, Subpart QQ, *Standards of Performance for Graphic Arts Industry: Publication Rotogravure Printing*, does not apply to the printing presses at this installation because they are sheet-fed presses, not rotogravure printing machines.

No other NSPS regulations apply to this installation.

### **Maximum Available Control Technology Applicability**

The installation is not a major source for any single hazardous air pollutant (HAP) nor for total HAPs. Therefore, no MACT regulations apply to it.

### **National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability**

In the permit application and according to APCP records, there was no indication that any Missouri Air Conservation Law, *Asbestos Abatement*, 643.225 through 643.250; 10 CSR 10-6.080, *Emission Standards for Hazardous Air Pollutants*, Subpart M, *National Standards for Asbestos*; and 10 CSR 10-6.250, *Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements*, apply to this installation. The installation is subject to these regulations if they undertake any projects that deal with or involve any asbestos containing materials. None of the installation's operating projects underway at the time of this review deal with or involve asbestos containing material. Therefore, the above regulations were not cited in the operating permit. If the installation should

undertake any construction or demolition projects in the future that deal with or involve any asbestos containing materials, the installation must follow all of the applicable requirements of the above rules related to that specific project.

No other NESHAP regulations apply to this installation.



## Other Regulatory Determinations

- 1) 10 CSR 10-3.060, *Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating*, does not apply to Boiler EU0040. Per 10 CSR 10-3.060(3)(E), it is exempt because it is subject to the provisions of 10 CSR 10-6.070, *New Source Performance Regulations*.
- 2) 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*
  - a) This regulation applies to boilers EU0010 through EU0030, which fire natural gas as a primary fuel and fuel oil as a back-up fuel. AP-42, 1.5.3.1 states that liquefied petroleum gas does not produce visible emissions, even though it does produce a small amount of particulate matter. The same is true for natural gas. (See note (a) on Table 1.5.1 in that same section of AP-42.). Therefore, an emission unit that burns natural gas will automatically be in compliance with this regulation. Hence, the monitoring requirements for this regulation apply only during periods when the boilers are burning fuel oil.
  - b) This regulation does not apply to boiler EU0040. Per 10 CSR 10-6.220(1)(H), it is exempt because it is subject to the provisions of 10 CSR 10-6.070, *New Source Performance Regulations*.
  - c) This regulation does not apply to the emergency diesel generator EU0050. Per 10 CSR 10-6.220(1)(A), it is exempt because it is an internal combustion engine.
- 3) 10 CSR 10-6.260 *Restriction of Emissions of Sulfur Compounds*, does not apply to boiler EU0040. Per 10 CSR 10-6.260(1)(A)1, it is exempt because it is subject to an applicable sulfur compound emission limit under 10 CSR 10-6.070, *New Source Performance Regulations*.
- 4) 10 CSR 10-6.360 *Control of Emissions of NO<sub>x</sub> Emissions From Electric Generating Units and Non-Electric Generating Boilers*, does not apply to the boilers EU0010 through EU0040 or to the emergency diesel generator EU0050. Per 10 CSR 10-6.360(1)(A), they are exempt because the installation is located in Randolph county.
- 5) 10 CSR 10-6.390 *Control of Emissions of NO<sub>x</sub> Emissions From Large Stationary Internal Combustion Engines*, does not apply to the emergency diesel generator EU0050. Per 10 CSR 10-6.390(1)(A), it is exempt because the installation is located in Randolph county.
- 6) 10 CSR 10-6.400 *Restriction of Emission of Particulate Matter From Industrial Processes*
  - a) This regulation does not apply to the boilers EU0010 through EU0040. Per 10 CSR 10-6.400(1)(B)6, they are exempt because they burn fuel for indirect heating.
  - b) This regulation does not apply to the emergency diesel generator EU0050. Per 10 CSR 10-6.400(1)(B)(11), it is exempt because it has the potential to emit (PTE) less than one-half pound per hour of particulate matter. The calculations below demonstrate this.

Maximum Hourly Design Rate (MHDR) = 40 gal/hr

PM emission factor for combustion (EF) = 2 lb/10<sup>3</sup> gal/hr [From Table 1.3-1 in AP-42.]

$$PTE = \left( \frac{40 \text{ gal}}{\text{hr}} \right) \left( \frac{2 \text{ lb PM}}{10^3 \text{ gal}} \right) = 0.08 \text{ lb PM / hr}$$

- c) This regulation does not apply to the paint booths as long as the filters are maintained and operated correctly. Per 10 CSR 10-6.400 (1)(B)(11), they are exempt because each has the potential to emit (PTE) less than one-half pound per hour of particulate matter under these conditions. The calculation below demonstrates this.

Highest Maximum Hourly Design Rate for any paint booth = 1.89 gal/hr

Weight of coating = 10 lb/gal

Percent solids by weight in coating = 30%

Transfer efficiency for all paint booths = 50%

Control efficiency for all paint booths = 95%

$$\text{PTE} = \left( \frac{1.89 \text{ gal}}{\text{hr}} \right) \left( \frac{10 \text{ lb PM}}{\text{gal}} \right) (0.30) (0.50) \left( 1 - \frac{95}{100} \right) = 0.14 \text{ lb PM / hr} < 0.5 \text{ lb PM / hr}$$

However, since control efficiency is a critical factor in this calculation, the regulation is included in this permit. It is included only for the purpose of enforcing proper maintenance and operation procedures for the filters. This ensures that the paint booths remain below the 0.5 lb PM/hr emission limit which exempts them from the more onerous requirements of the regulation.

- 7) Usually, reporting specified under Section V of intermediate permits is only required annually. For this permit, it is required semi-annually. This is necessary to meet the requirements of 40 CFR 60 Subpart Dc (Permit Condition EU0040-001).

#### **Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis**

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons.

- 1) The specific pollutant regulated by that rule is not emitted by the installation.
- 2) The installation is not in the source category regulated by that rule.
- 3) The installation is not in the county or specific area that is regulated under the authority of that rule.
- 4) The installation does not contain the type of emission unit which is regulated by that rule.
- 5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program's satisfaction, the installation's compliance with that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the APCP a schedule for achieving compliance for that regulation(s).

Prepared by:

---

Cheryl Steffan  
Environmental Engineer

Mr. Tony Gammon, Superintendent  
Moberly Correctional Center  
5201 South Morley  
Moberly, MO 65270

Re: Moberly Correctional Center, 175-0034  
Permit Number:

Dear Mr. Gammon:

Enclosed with this letter is your intermediate operating permit. Please review this document carefully. Operation of your installation in accordance with the rules and regulations cited in this document is necessary for continued compliance. It is very important that you read and understand the requirements contained in your permit.

If you have any questions or need additional information regarding this permit, please contact the Air Pollution Control Program (APCP) at (573) 751-4817, or you may write to the Department of Natural Resources' Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.  
Operating Permit Unit Chief

MJS:csk

Enclosures

c: Ms. Tamara Freeman, US EPA Region VII  
Ms. Abbie Stockett, Northeast Regional Office  
PAMS File: 2005-03-112

CERTIFIED MAIL: 70041160000081694368  
RETURN RECEIPT REQUESTED

Mr. Ed Haynes  
Plant Maintenance Engineer  
Moberly Correctional Center  
5201 South Morley  
Moberly, MO 65270

Re: Draft Intermediate Operating Permit – Project (PAMS): 2005-03-112

Dear Mr. Haynes:

The Air Pollution Control Program (APCP) has completed the preliminary review of your Intermediate (Title V) permit application. A public notice will be placed in the Moberly Monitor-Index on Sunday, July 23, 2006.

The APCP will accept comments regarding the draft permit that are postmarked on or before the closing date. It is very important that you read and understand this legal document. You will be held responsible for complying with this document.

Please address comments or recommendations for changes to my attention at:

Operating Permits Unit  
Air Pollution Control Program  
P.O. Box 176  
Jefferson City, MO 65102

A copy of this draft is also being sent to the U.S. EPA's Region VII office in Kansas City for their review. The Region VII office is afforded, by law, oversight authority on any Title V permit which Missouri (or any of the other states in the region) may propose to issue. A public hearing may be held if interest is expressed by the public.

Should you have any questions, or wish clarification on any items in this draft permit, please feel free to contact me at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Cheryl Steffan  
Environmental Engineer

CAS/kdm

Enclosures

c: Ms. Tamara Freeman, US EPA Region VII  
Northeast Regional Office  
PAMS File: 2005-03-112

**There are no affected states.**

RE: Affected States Review – Notification of Proposed Final Intermediate Operating Permit

Dear Mr. {Director's Name}:

In accordance with Missouri State Rule 10 CSR 10-6.065(5)(F)1. and the Clean Air Act this letter is to notify you of public notice of the preliminary draft and request for comments for:

Moberly Correctional Center located in Moberly, MO 65270

Project Number – 2005-03-112

Public notice will be published in the Moberly Monitor-Index on Sunday, July 23, 2006.

You are invited to submit any relevant information, materials, and views in support of or in opposition to the draft operating permits in writing by no later than August 22, 2006 to my attention at Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

Should you require further information or documentation on this matter, please contact the Operating Permits Unit at (573) 751-4817, or you may write to the Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102. Thank you for your time and attention.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.  
Operating Permit Unit Chief

MJS: csk

For Publication on Sunday, July 23, 2006

Notice of documents available for public viewing  
Department of Natural Resources  
Air and Land Protection Division  
Air Pollution Control Program

A draft-operating permit has been issued for the following air pollution sources:

Installation	City	Project #
Moberly Correctional Center	Moberly	2005-03-112

Activities included in these permits are all activities involved in the operation of these sources with the potential for producing regulated quantities of regulated air pollutants.

Copies of the draft permits are available for public comment. Public files containing copies of all non-confidential materials and a copy or summary of other materials, if any, considered in this draft permit, are available for public viewing at the following locations: MO Dept. of Natural Resources, Northeast Regional Office, 1709 Prospect Drive, Macon, MO 63552 or by written request from the Air Pollution Control Program, Operating Permits Unit, P.O. Box 176, Jefferson City, MO 65102 (Any information deemed confidential business information pursuant to Missouri State Rule 10 CSR 10-6.210, *Confidential Information*, if any exists, are not included in the public files. Emission data, as defined by this rule, cannot be considered confidential business information.)

The file is available for viewing through August 22, 2006. Citizens are invited to submit any relevant information, materials, and views in support of or in opposition to the draft operating permits in writing no later than August 22, 2006. Written comments and/or requests for public hearing should be sent to Mr. Jim Kavanaugh, Missouri Department of Natural Resources, Air Pollution Control Program, P.O. Box 176, Jefferson City, MO 65102.

The Air Pollution Control Program will hold an informal public hearing after an additional 30 day comment period on the draft permit if: 1.) A timely request is made for such a hearing during the public comment period; and 2.) The person requesting the hearing identifies material issues concerning the preliminary determination and the Air Pollution Control Program determines that a public hearing will be useful in resolving those issues.

This public notice is made pursuant to Missouri State Rule 10 CSR 10-6.065, Operating Permits.

Moberly Monitor-Index  
218 North Williams  
PO Box 697  
Moberly, MO 65270

Attention: Legal Ads

To Whom It May Concern:

We wish to place the attached legal advertisement in your newspaper to be run ONCE. It must run on Sunday, July 23, 2006.

We require a certified affidavit of publication. This must be received in our office by August 4, 2006. Please submit the affidavit and invoice for payment to:

Attention: Cheri Bechtel  
Department of Natural Resources  
Air Pollution Control Program  
P. O. Box 176  
Jefferson City, MO 65102

If you have any questions, please contact me at (573) 751-4817. Thank you for your assistance.

Sincerely,

AIR POLLUTION CONTROL PROGRAM

Michael J. Stansfield, P.E.  
Operating Permits Unit Chief

MJS/csk

c: Cheri Bechtel, Procurement Clerk  
PAMS File: 2005-03-112

MISSOURI DEPARTMENT OF NATURAL RESOURCES FOLDER TRANSMITTAL ROUTING SHEET		Document #: Division Log #: Program Log #:
DEADLINE: Date		Penalty for Missing Deadline: None
Moberly Correctional Center		2005-03-112
Originator: Cheryl Steffan		Telephone: (573) 751-4817
		Date:
Typist: Karla Marshall		File Name: P:\APCP\Permits\Users\Operating Permits\Permits on Public Notice\2005-03-112 Moberly Correctional Center.doc
FOR SIGNATURE APPROVAL OF:		
<input type="checkbox"/> DNR Director <input type="checkbox"/> DNR Deputy Director <input type="checkbox"/> Division Director <input type="checkbox"/> Division Deputy Director    X Other: James L. Kavanaugh		
PROGRAM APPROVAL: Approved by: _____ Program: APCP Date: _____		
Other Program Approval (Section/Unit): _____ Date: _____		
Comments:		
ROUTE TO:		
<input type="checkbox"/> DIVISION DIRECTOR APPROVAL: _____		Date: _____
Comments:		
<input type="checkbox"/> FINANCIAL REVIEW – DIVISION OF ADMINISTRATIVE SUPPORT:		
DAS Director: _____		Date: _____
<input type="checkbox"/> Fee Worksheet Received By: _____		Date: _____
Accounting: _____		Date: _____
Budget: _____		Date: _____
General Services: _____		Date: _____
Internal Audit: _____		Date: _____
Purchasing: _____		Date: _____
Comments:		
<input type="checkbox"/> LEGAL REVIEW:		
<input type="checkbox"/> General Counsel: _____		Date: _____
<input type="checkbox"/> AGO: _____		Date: _____
Comments:		
<input type="checkbox"/> DEPARTMENT DIRECTOR APPROVAL: _____		Date: _____
Comments:		
<input type="checkbox"/> NOTARIZATION NEEDED		
		INITIALS/DATE